CLAIMS:

1.       A method of selecting a communication path, in a wireless network comprising a plurality of nodes and wireless communication links between the nodes, from a plurality of
5   potential communication paths comprising different combinations of said links from a source node to a target node, comprising the steps of, in the source node:
        determining for each link in the potential communication paths a cost of interference dependent upon a
10  number of nodes affected by a signal sent via the respective link;
        determining a total cost for each potential communication path, the total cost being dependent upon combined costs of interference for the links of the respective
15  potential communication path; and
        selecting as a communication path from the source node to the target node a potential communication path having a lowest total cost.

2.       A method as claimed in claim 1 and including the step
20  of, in the source node, determining for each link in the potential communication paths a cost of transmission dependent upon a data rate for a signal sent via the respective link, wherein the total cost determined for each potential communication path is also dependent upon combined costs of
25  transmission for the links of the respective potential communication path.

3.       A method as claimed in claim 1 and including the step of, in the source node, determining for each link in the potential communication paths a cost of coordination of
30  transmissions on the link with transmissions from other nodes of the network, wherein the total cost determined for each

potential communication path is also dependent upon combined costs of coordination for the links of the respective potential communication path.

4.      A method as claimed in claim 2 and including the step of, in the source node, determining for each link in the potential communication paths a cost of coordination of transmissions on the link with transmissions from other nodes of the network, wherein the total cost determined for each potential communication path is also dependent upon combined costs of coordination for the links of the respective potential communication path.

5.      A method as claimed in claim 1 wherein the source node determines the total cost for each potential communications path as a sum of the combined costs for the links of the respective potential communication path.

6.      A method as claimed in claim 2 wherein the source node determines the total cost for each potential communications path as a sum of the combined costs for the links of the respective potential communication path.

7.      A method as claimed in claim 3 wherein the source node determines the total cost for each potential communications path as a sum of the combined costs for the links of the respective potential communication path.

8.      A method as claimed in claim 1 wherein the cost of interference for each link in the potential communication paths determined by the source node is also dependent upon a time interval required for a signal sent via the respective link.

9.      A method as claimed in claim 2 wherein the cost of interference for each link in the potential communication paths

determined by the source node is also dependent upon a time interval required for a signal sent via the respective link.

10. A method as claimed in claim 3 wherein the cost of interference for each link in the potential communication paths determined by the source node is also dependent upon a time interval required for a signal sent via the respective link.

11. A method as claimed in claim 3 wherein the cost of coordination for each link in the potential communication paths determined by the source node is also dependent upon a time interval required for coordinating activities.

12. A node for a wireless network, the node providing wireless communication links for wireless communications with other nodes of the network and being operable in accordance with the method of claim 1.

13. A node for a wireless network, the node providing wireless communication links for wireless communications with other nodes of the network and being operable in accordance with the method of claim 2.

14. A node for a wireless network, the node providing wireless communication links for wireless communications with other nodes of the network and being operable in accordance with the method of claim 3.

15. A node for a wireless network, the node providing wireless communication links for wireless communications with other nodes of the network and being operable in accordance with the method of claim 5.

16. A node for a wireless network, the node providing wireless communication links for wireless communications with

other nodes of the network and being operable in accordance with the method of claim 8.

17.     A wireless network comprising a plurality of nodes each as claimed in claim 12.

5    18.     A wireless network comprising a plurality of nodes each as claimed in claim 13.

19.     A wireless network comprising a plurality of nodes each as claimed in claim 14.

20.     A wireless network comprising a plurality of nodes 10   each as claimed in claim 15.